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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/574,229	05/19/2000	Toru Chiba	P19101	7775

7055 7590 09/23/2004

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EXAMINER

HECKENBERG JR, DONALD H

ART UNIT PAPER NUMBER

1722

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/574,229

Applicant(s)

CHIBA, TORU

Examiner

Donald Heckenberg

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,21,23,27,28 and 30-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,21,23,27,28 and 30-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 May 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. A request for continued examination (RCE) under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 9, 2004 has been entered.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1, 2, 21, 23, 27, 28, and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neefe (U.S. Pat. No. 4,416,837; previously of record) in view of Rawlings (U.S. Pat. No. 4,517,140).

Neefe discloses a lens molding die for spin casting of contact lenses. The die comprises a base member (2) made of a hard metal material (see fig. 1 and cl. 1, ll. 50-51). The base member has a spherically shaped surface (3). A resin-molded surface layer is formed on the spherical surface of the base member (see fig. 2 and cl. 1, ll. 55-65). The resin molded surface layer is provided with an aspheric surface shape corresponding to the shape of the lens to be produced (figs. 2-3). The surface shape of the resin molded surface layer is uninterrupted- that is smooth with no notches or other discontinuous structures (see fig. 2). The aspheric surface layer, while conforming to the spherically shaped surface of the base member, has a different curvature than the curvature of the spherically shaped surface of the base member (fig. 2). The thickness of the resin-molded surface layer is less than the thickness of the base member (fig. 2), and the resin-molded surface layer is as such to be inactive with a material to be

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molded by the lens molding die (see cl. 1, l. 67 - cl. 2, l. 8, noting that cross-linking agents are used to prevent the lens from sticking to the surface of the resin-molded layer, thus in effect making the resin molded surface and the lens molding material inactive with each other). As shown in fig. 2, the thickness of the resin-molded surface layer is configured to vary only in accordance with the aspheric component of the resin-molded surface layer.

Neeffe does not disclose a cylindrical holder configured to surround and hold the base member, nor a ring-shaped positioning member configured to coaxially engage the cylindrical holder.

In the same field of endeavor as Neeffe, Rawlings discloses a molding structure for spin casting of contact lenses. Rawlings provides a cylindrical holder (2) configured to surround and hold the base member (12) of the mold (8) in order to allow for the rotation of the mold member during casting (cl. 8, ll. 35-38). Rawlings further provides a ring-shaped positioning member (36) configured to coaxially engage the cylindrical holder in order to, among other things, impart the rotation to the cylindrical holder and mold (cl. 9, ll. 3-33).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have modified the apparatus disclosed by Neeffe as such to further provide a

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cylindrical holder because this would allow for rotation of the mold member during the lens casting process as suggested by Rawlings. It further would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have modified the apparatus disclosed by Neeffe as such to have also provided a ring-shaped positioning member coaxially engaging the cylindrical holder because this would further allow for the rotation to be imparted to the cylindrical holder and thus the mold member, as suggested by Rawlings.

5. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neeffe modified by Rawlings as applied to claims 1, 2, 21, 23, 27, 28, and 33-35 above, and further in view of Blum (U.S. Pat. No. 5,141,678; previously of record).

Neeffe and Rawlings disclose and suggest the lens mold as described above, notably including the use of a resin molded surface layer. However, Neeffe and Rawlings do not disclose the type of resin molded surface layer used.

Blum discloses a lens molding die provided with a resin molded surface layer (12). Blum notes that such a surface layer may alternatively be made from thermosetting or ultraviolet curable resins (cl. 3, ll. 41-42 and cl. 4, ll. 4-13).

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It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have used either a thermosetting or ultraviolet curable resin to form the resin molded surface layer disclosed and suggested by Neeffe and Rawlings because these are two types of resins known in the art as suitable to form such lens mold layer as suggested by Blum.

6. Claims 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neeffe modified by Rawlings as applied to claims 1, 2, 21, 23, 27, 28, and 33-35 above, and further in view of Ishihara et al. (U.S. Pat. No. 6,315,929; previously of record).

Neeffe and Rawlings disclose and suggest the lens molding die as described above, notably including the use of a resin molded surface layer. However, Neeffe and Rawlings do not disclose the thickness of the resin molded surface layer.

Ishihara discloses a lens molding die. The lens molding die is provided with a resinous surface layer (10). Ishihara notes the surface layer should be in the range of 0.1 - 10 mm thick for assuring high molding efficiency (cl. 6, ll. 22-33).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have made the resin molded surface layer of Neeffe and Rawlings 0.1 - 10 mm thick

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because such a thickness allows for high molding efficiency as suggested by Ishihara. Note, the range of 0.1 - 10 mm fully encompasses, and thus anticipates, the claimed range of 0.2 to 0.5 mm recited in the instant application. Note further, this modification of the die disclosed and suggested by Neefe , Rawlings, and Ishihara amounts to the optimization of a property of the apparatus- the thickness of the resin molded surface layer. Generally, the optimization of a known cause effective variable such as the thickness of the resin surface layer is seen as obvious to one of ordinary skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980); In re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1955).


7. Applicant's arguments with respect to claims 1, 21, 23, and 33-35 have been considered but are moot in view of the new grounds of rejection described above.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald Heckenberg whose telephone number is (571) 272-1131. The examiner can normally be reached on Monday through Friday from 9:30 A.M. to 6:00 P.M.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin Utech, can be reached at (571) 272-1137. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <<<http://pair-direct.uspto.gov>>>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

 9-17-04
Donald Heckenberg
A.U. 1722